



# YSLETA INDEPENDENT SCHOOL DISTRICT

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## IBM Statement of Work for Cabling Services IBM/YISD ER5-001

*Prepared for*

**Ysleta ISD**

January 17, 2002



**IBM Global Services  
San Antonio, Texas**

The information in this proposal shall not be disclosed outside the YSLETA INDEPENDENT SCHOOL DISTRICT organization and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the proposal, provided that if a contract is awarded to IBM as a result of or in connection with the submission of this proposal, YSLETA INDEPENDENT SCHOOL DISTRICT shall have the right to duplicate, use, or disclose the information to the extent provided by the contract. This restriction does not limit the right of YSLETA INDEPENDENT SCHOOL DISTRICT to use information contained in the proposal if it is obtained from another source without restriction.

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## STATEMENT OF WORK

### Introduction

This section describes the Services that IBM will provide under the terms of the Agreement formed by the IBM Customer Agreement (ICA), Ysleta Independent School District RFP #22-1115-016RFP and the Contractor's Appendix to RFP#22-1115-016RFP, the General Contract (dated January 17, 2002), and this Statement of Work (SOW). Once accepted and signed by Ysleta ISD, this Statement of Work and its terms and conditions, becomes part of the Agreement. Specifically, IBM will provide Ysleta Independent School District (Ysleta ISD) with a set of customized e-ratable services, with supporting documentation. The details of the Services to be provided are described in this section. These Services will be provided at existing and newly built Ysleta ISD locations in El Paso, Texas.

IBM will provide the cabling installation, and functional testing to Ysleta ISD to support moves, adds and changes for the existing cable plant.

***This Statement of Work is comprised of the following sections:***

1. Assumptions
2. IBM Responsibilities
3. Ysleta ISD Responsibilities
4. Deliverable Materials - Documentation
5. Project Schedule
6. Completion Criteria
7. Charges
8. Project Warranty

***The following are incorporated in and made part of this Statement of Work:***

- Appendix A, Deliverable Materials - Documentation
- Appendix B, Project Change Control Procedure
- Appendix C, Cabling Installation and Testing Specifications
- Appendix D, Signature Page

Changes to this Statement of Work will be processed in accordance with the procedure described in Appendix B, "Project Change Control Procedure." The investigation and the implementation of changes may result in modifications to the Schedule, Charges or other terms of this Statement of Work.

This offer will expire December 31, 2002 unless this date is extended by IBM and in writing.

## 1.0 ASSUMPTIONS

*This SOW is based on the following assumptions:*

### General Scope Description

1. Only those components specified in this SOW are to be supplied and installed by IBM. Additional components can be specified via the Project Change Control Procedure detailed in Appendix B.
2. Media runs from aerial risers to a portable classroom or cottage risers are an average distance of seventy-five (75) feet.
3. Media runs from the existing MC to the IC are three hundred fifty (350) feet average distance inside the building that houses the MC and one hundred **(100)** feet average distance outside the building that houses the MC.
4. One portable classroom building represents one **(1)** classroom composite drop.
5. One cottage represents one **(1)** classroom composite drop.
6. The number of required fiber paths from the existing IC to the existing MC are available to support the portable classroom buildings and cottages at the campus.
7. Data fiber paths are only terminated in this SOW.
8. Video paths are only terminated in this SOW. None of the following video items are being supplied or installed as part of this SOW: patch cables/cords/balans/media converters/video distribution components.
9. Only one (1) voice line support will be terminated to the composite drop faceplate insert. Only one (1) pair per cat-5e voice cable will be cross-connected at the IC to the voice tie cable.
10. Work to be performed at specific sites will be mutually agreed to and scheduled with IBM and Ysleta ~~ISD~~ at least ten **(10)** business days prior to the commencement of the work.
11. IBM and our subcontractor must have unlimited, unrestricted access **to** all buildings. Any security requirements inclusive of guards, security ~~codes~~/access codes, lighting and internal access and/or central monitoring are the responsibility of Ysleta ISD.
12. IBM will be provided with access badges, keys and combinations or escorts to perform the work described in this SOW. Any delay encountered due to unavailability of buildings may result in additional charges being incurred by Ysleta ISD. **If** this situation arises, it will be addressed via the Project Change Control Procedure detailed in Appendix B.
13. Adequate wall ~~space~~/wiring closet space will be made available to IBM for the purpose of placing MDF/IDF products and equipment installed under this agreement. **It** is understood by IBM and Ysleta ISD that any delay encountered due to insufficient wall ~~space~~/insufficient wiring closet space may result in time delays and additional charges incurred by Ysleta ISD. **If** this situation arises, it will be addressed via the Project Change Control Procedure detailed in Appendix B.
14. It is understood by Ysleta ISD and IBM that this SOW is based upon the Start Date provided below. In the event this date is not achieved, IBM reserves the right to extend the projected project End Date on a working day for working day basis, and as mutually

agreed upon by IBM and Ysleta **ISD** via the Project Change Control Procedure detailed in Appendix B.

15. It is understood by Ysleta **ISD** and IBM that this SOW and the pricing associated with this SOW are based upon the award of the total proposed SOW described in this document. The work described in this SOW will be performed during one continuous phase.

16. Work will be performed only at eligible sites.

28/10/03

## 1.2 Exclusions from this Statement of Work

1. IBM is not responsible under this SOW for the identification or correction of any existing safety and/or code violations, whether federal, state or local, including but not limited to fire and electrical codes. If IBM should discover any safety and/or code violations during the course of this project, IBM will notify Ysleta **ISD** of the problem. IBM will not be required to proceed with its work under this SOW until Ysleta **ISD** remedies such violation, nor will IBM be responsible for delays to the work caused by such violation.
2. IBM will not be responsible for the detection or removal of asbestos, hazardous waste or other pollutants.
3. It is specifically understood by Ysleta **ISD** and IBM that all matters relating to detection and/or abatement or removal of asbestos, hazardous waste or other pollutants are beyond the scope of this contract and that IBM shall not be liable for any delay or additional cost incurred as a result of such detections and/or abatement. If asbestos, hazardous waste or other pollutants are uncovered during the course of the work on the contract, then Ysleta **ISD** shall be responsible for retaining the experts necessary to remove such asbestos, hazardous waste or pollutants from the site. Ysleta **ISD** shall also be responsible for any testing and corresponding with appropriate government authorities.
4. Relocation and testing of existing computers, telecommunications, or CCTV equipment(s) or systems are not required as part of this SOW.
5. Removal of existing telecommunications or CCTV cabling is not required as part of this project.
6. Installation of any hardware, software and network electronics not specified in this SOW (e.g., workstations, servers, printers, routers, **DSUs/CSUs**, repeaters, modulators) are the responsibility of Ysleta **ISD**.
7. We are not providing any Year 2000 services under this Statement of Work. IBM Product Specifications specify the Year 2000 readiness of the IBM Products. We do not make any representations regarding the Year 2000 readiness of the non-IBM Products.
8. Under the terms of this Statement of Work we are not responsible for 1) your products, 2) a third party's products (including products you license from our subcontractors) or 3) IBM's previously installed Products, ("Other Products") to correctly process or properly exchange accurate data with the Products or deliverables we provide. We will be relieved of our obligations under this Statement of Work due to the inability of such Other Products to correctly process or properly exchange accurate data with the Products or deliverables we provide to you. You acknowledge that it is your responsibility to assess your current systems and take appropriate action to migrate to Year 2000 ready systems.
9. It is understood by Ysleta **ISD** and IBM that all matters relating to physical construction of new wiring closets/equipment locations and retrofits for existing wiring closets/equipment locations, (general construction buildout, HVAC, electrical, lighting, construction permits) is the responsibility of Ysleta **ISD**.

## 2.0 IBM RESPONSIBILITIES

### 2.1 Project Management

**Task Description:** The objective of this task is to provide technical direction, maintain project control and to establish a framework for, reporting, procedural, and contractual activity for the IBM tasks described. This task consists of the following activities:

- Establish procedures and **coordinate** IBM efforts with the Ysleta ISD Contact Person.
- Develop and maintain work plans for the performance of IBM responsibilities.
- Administer the Project Change Control Procedures.
- Review the project progress with the Ysleta ISD Contact Person and team members during Monthly status meetings.
- Prepare and submit written Monthly Status Report of IBM activities to Ysleta **ISD**.

**Completion Criteria:** This task will be considered complete when the other tasks identified under IBM Responsibilities have been complete and Final Status Report has been delivered to Ysleta ISD.

**Deliverables/Documentation:** Monthly Status Report

### 2.2 Install and Test Cabling

**Task Description:** IBM will install and test cabling in support of the adds, moves, and changes to the cabling plant at Ysleta ISD per the specifications contained in Appendix C. The sub-tasks are:

- Provide up to 3000 cable drops, and associated equipment.
- Provide moves, adds and changes to the existing cable plant. **It** is understood that moves of cable drops will be to a point closer to the communication closet. The cable drops moved will be tested to verify that they meet specification requirements.
- Provide cabling connections between the main building at a campus and new buildings, which are not portables or cottages for the purpose of delivering signal to their ICs.
- Provide cabling installation for designated new schools built in the District within the contract term
- Provide cabling to attach designated portable classroom buildings moved between campuses as required based on the terms outlined in the contract.
- Build portable ICs for portables moved between campuses as required based on the terms outlined in the contract.
- Install specified data drops including the installation of a 2' cabinet rack in District computer labs, MCs, and ICs and HC's.
- Build MCs and ICs facilities as defined in Appendix C.
- Provide testing for the cabling installed under this **SOW** as defined in Appendix C.
- Develop "As Built" drawings to document the cabling installation provided - documentation.
- Compile Project Cabling Test Results documentation,



**Completion** Criteria: This task will be considered complete when IBM delivers one (1) set of "As Built" drawings and one (1) copy of the Project Cabling Test Results document to Ysleta ISD.

**Deliverables/Documentation:**

"As Built" drawings

Project Cabling Test Results document

## **2.3 Survey, Test and Document District Cabling Plant**

Task Description: IBM will test the existing' cabling plant at the various campuses of Ysleta Independent School District to determine the reliability and performance of each plant. Each plant will be documented and any wiring segments that fail or are nominally passing will be reported to Ysleta ISD. IBM with Ysleta Independent School District's Project Manager will then determine a remedial course of action to repair failing or sub performing segments. The sub-tasks are:

- Verify and correct site general information, if necessary.
- Identify and document site's special considerations:
- Site's labor requirements and works restrictions (e.g. union vs. Non-union environments, works hours, access restrictions, special condition or limitations) that may affect the site's rollout.
- Safety regulations - as may apply from municipalities
- Site security requirements
- Any unusual site conditions (e.g., site to be closed in one week)
- Identify Equipment Room locations and requirements
- Isolated electrical power circuit availability
- Heating and air-conditioning
- True earth ground availability
- Access security
- Fiber/Telephone circuit connection – DS3, T1, ISDN
- Define portable distances and type of antenna needed
- Define parameters of installation – how many portables at each site and how to be configured in wireless network

Deliverables/ Documentation - Project Cabling Test Results document

### **3.0 YSLETA ISD RESPONSIBILITIES**

The responsibilities listed in this section are in addition to those responsibilities specified in the IBM Customer Agreement and are to be provided at no charge to IBM. IBM's performance is predicated upon the following responsibilities being fulfilled by Ysleta ISD.

#### **3.1 Project Management**

- Provide a Project Manager for the duration of the project to whom IBM and Ysleta ISD communications can be addressed and who has the authority to act on behalf of Ysleta ISD on all aspects of the project.
- Manage and perform the Ysleta ISD Responsibilities contained in Section 3.0.
- Provide liaison between project participants.
- Manage the Project Change Control Procedure for Ysleta ISD.
- Respond within two (2) business days to any request by IBM unless mutually agreeable by Ysleta ISD and IBM.
- Help resolve project issues with the Ysleta ISD organization.
- Provide full access to all School locations as Ysleta ISD required under this SOW
- Communicate with appropriate Ysleta ISD personnel at your location of the work to take place and obtain their approval if necessary.
- Provide floor diagrams of affected campus locations in 8 1/2 x 11 hardcopy format
- Provide all the necessary closet and/or equipment areas for location of network electronics, racks and cabinets as described within this SOW.
- Provide all necessary power and environmental support to accommodate all IBM and Ysleta ISD provided equipment.
- Inform IBM of any change in network requirements in accordance with the IBM Project Change Control Procedure, Appendix B.
- Provide required conduit and trenching within the project schedule timeframe should Ysleta ISD require IBM to utilize buried or underground conduit that does not currently exist.
- Provide personnel to witness and authorize standard testing of each school building as the installation/testing activities are completed.
- Locate and mark all water, gas, electrical or any other underground pipes or cabling in the path required for the trenching for the fiber connection, before trenching can be started.
- Permit posting of any notifications required by applicable law for Services provided at your locations.

## 3.2 Space, Facilities and Utilities

- Provide installation facilities for all equipment. Ysleta ISD is responsible for space allocation, HVAC and electrical considerations. Ysleta ISD is responsible for providing power, light and water necessary in performance of this project.
- IBM and our subcontractor will have access to all buildings to perform the IBM Responsibilities specified in this Statement of Work. Any security requirements inclusive of guard, security codes/access codes, lighting and internal access and/or central monitoring are the responsibility of Ysleta ISD.
- Adequate space will be made available for the installation of all products related to this project.

## 3.3 Security and Laws

Ysleta ISD will identify and make the interpretation of any applicable federal, state, and local laws, regulations and statutes to see that the services provided by IBM comply.

## 3.4 Data Privacy

You agree to allow us and entities within our Enterprise to store and use your contact information, including names, phone numbers, and e-mail addresses, anywhere IBM does business. We will process such information in connection with our business relationship, and we reserve the right to provide such information to entities within our Enterprise, our contractors, Business Partners and assignees for uses consistent with their collective business activities, including communicating with you (for example, for processing orders, for promotions, and for market research).

## 3.5 Required Consents

Before IBM begins performance under this Statement of Work, Ysleta ISD shall be responsible for promptly obtaining and providing for IBM all "Required Consents" necessary to IBM to access, use, and/or modify software, hardware, firmware, and other products used by Ysleta ISD for which IBM shall provide services described herein. A Required Consent means any consents or approvals required to give IBM and its subcontractors the right or license to access, use, and/or modify (including creating derivative works) Ysleta ISD's or a third party's software, hardware, firmware, or other products used by Ysleta ISD without infringing the ownership or license rights (including patent and copyright) of the providers or owners of such products.

Ysleta ISD agrees to indemnify, defend, and hold IBM and its affiliates harmless from and against any and all claims, losses, liabilities, and damages (including reasonable attorneys fees and **costs**) arising from or in connection with any claim (including patent and copyright infringement) made against IBM alleged to have occurred as a result of Ysleta ISD's failure to provide any Required Consents.

**IBM shall be relieved of the performance of any obligations that may be affected by Ysleta ISD's failure to promptly provide any Required Consents to IBM.**

## 4.0 DELIVERABLE MATERIALS) DOCUMENTATION

The following items will be delivered to Ysleta ISD under this Statement of Work. See Appendix A, "Deliverable / Documentation Guidelines" for a description of each deliverable/documentation. The deliverables are as described in the **IBM** Customer Agreement.

- Monthly Status Reports
- "As-built" drawings
- Project Cabling Test Results document
  - Project Cabling Test Results document for existing cable plant

## 5.0 PROJECT SCHEDULE

### 5.1 Project Dates

- Estimated Start Date – July 1, 2002.
- Estimated End Date – June 30, 2003.

### 5.2 Project Delays

IBM will not be responsible for delays or additional requirements imposed by any government agencies or unforeseen conditions such as delays in the progress of the project by your acts or neglect or the acts or neglect of your employees or separate contractors employed by you, by changes ordered in the project not caused by the fault of IBM, by labor disputes, fire, unusual delays in transportation, adverse weather conditions not reasonably *anticipatable*, unavoidable casualties or other causes beyond IBM's control or by another cause which you and IBM agree is justifiable, the contract time shall be reasonably extended and the charges adjusted, if necessary, by Change Authorization.

## 6.6 COMPLETION CRITERIA

IBM shall have fulfilled its obligations under this Statement of Work when any one of the following occurs:

- IBM accomplishes the tasks described in section 2.0, "**IBM** Responsibilities,"
- Ysleta **ISD** terminates the Project in accordance with the provisions of the IBM Customer Agreement.
- The End Date for the contract is reached.

## 7.6 CHARGES

The Services Charge stated here represents the maximum allowable charges for all services that may be provided under this Statement of Work. IBM understands that the decision to implement this project is contingent upon award to the District of funding under the E-rate program. IBM will not begin work on this project without written notification from Ysleta ISD that funding has been approved and that work should begin. If such notification has not been received by December 31, 2002, at IBM's option, IBM may terminate the portion of the Agreement represented by this Statement of Work or implement an extension of this Statement of Work, as well as changes in pricing or other terms and conditions as may be required, via the Project Change Control Procedure outlined in Appendix B.

Or this amount may be extended upon mutual agreement between Ysleta ISD and IBM as defined in the section titled Project Change Control Procedure. Should Ysleta ISD not receive the requested funding for E-rate 5 or should Ysleta ISD receive only partial funding, IBM will work with Ysleta ISD to incorporate those portions of E-rate 5 funding that can be accomplished based upon available funding. In addition, IBM agrees that the District may decide not to pursue this project, even though a full or partial FUNDING COMMITMENT notification has been received from the E-Rate FCC Snowe-Rockefeller administration. Neither party will incur obligations under the portion of the Agreement represented by this Statement of Work if the District chooses not to pursue the project, even though a full or partial FUNDING COMMITMENT has been received.

IBM reserves a purchase money security interest in the Machines until IBM receives payment of the amounts due. You authorize IBM to prepare and file a financing statement to perfect its purchase money security interest in all Machines you order and IBM delivers under this Statement of Work.

It is understood by Ysleta ISD and IBM that this SOW and its associated pricing is based upon IBM receiving written approval from Ysleta ISD to proceed with E-rate 5 no later than December 30, 2002. In the event this approval is not received by this date, IBM reserves the right to restructure the **SOW** to incorporate on those tasks that can be successfully completed by IBM prior to June 30, 2003. This proposal will remain valid through December 31, 2002.

Total IBM Statement of Work for Cabling Services..... **\$2,090,400** including travel and living expenses

Estimated Taxes.. ..... \$0

For purposes of applying for FCC Snowe-Rockefeller E-rate funding, the following breakout is provided.

A) E-rate Eligible Portion..... \$2,090,400

B) Non-Eligible Portion..... \$0

E-rate Invoicing: Prior to commencing work, IBM requires:

- 1) a fully signed contract signature sheet:
- 2) a P.O. in the amount that the E-rate program is not funding (e.g. non-discounted portion of the eligible costs plus the non-eligible **costs**), and;
- 3) a copy of the USAC's Funding Commitment Decision letter



As a service to the school, IBM will perform dual billing per E-rate terms and conditions. First, IBM will invoice the school monthly, as work is completed, for the 'non-discounted' portion of the ELIGIBLE items and any non-eligible items. Secondly, under separate invoice, IBM will invoice the E-rate FCC Snowe-Rockefeller administration for the remaining discounted portion of the ELIGIBLE items. Payment is due as specified in the invoice. Please note that although IBM will bill the school for the 'non-discounted' portion and other charges not eligible under the E-rate program, the school assumes responsibility for the entire contract services charge. Notwithstanding any other provision, the District has the right to terminate this agreement for business reasons if written termination notice is given to IBM prior to any work being performed or service provided.

Excluded from the Services Charge are items involving, but not limited to; repairs to the Location for correcting existing code deficiencies, painting, asbestos removal, plumbing, heating and ventilation, air conditioning work, etc.

IBM Service Provider Identification Number (SPIN): 143005607.

This offer will be withdrawn if IBM is not authorized to perform these Services by December 31, 2002.

## 8.0 Project Warranty

IBM warrants to the Owner that materials and equipment furnished under this Agreement will be new and that Work will be of good quality, free from improper workmanship and defective materials in conformance to applicable drawings and specifications. IBM agrees to correct Network Cabling work performed under this Agreement which proves to be defective in material (material) and/or workmanship for a period of one (1) year.

IBM does not guarantee or warrant, express or implied, the materials used in workmanship of supplies, materials, equipment or machinery manufactured by third parties and furnished and installed under this Agreement. IBM shall endeavor to obtain from all vendors and suppliers and assign to Owner the customary warranties and guaranties of such vendors and suppliers with respect thereto. IBM shall render reasonable assistance to Owner when requested in order to enable the Owner to enforce such warranties and guaranties by third party manufacturers and suppliers.

There are no other warranties, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

## APPENDIX A DELIVERABLE MATERIALS - DOCUMENTATION

### A.1 Monthly Status Reports

**Purpose:** IBM will provide Status Reports Monthly during the project to describe the activities, which took place during that period. Significant accomplishments, milestones and problems will be described.

**Delivery:** One (1) hard copy will be delivered to the Ysleta ISD Project Manager within five (5) working days following the reporting period.

**Content:** The report will consist of the following, as appropriate:

- Activities performed during the reporting period
- Activities planned for the next reporting period
- Project change control summary
- Problems, concerns, and recommendations
- Billing summary

### A.2 Documentation: "As Built" Drawings

**Purpose:** IBM will provide 8 1/2 x 11" "As-built" drawings, marked-up plan views showing drop and MC/IC equipment locations.

**Delivery:** One (1) hard copy will be delivered to the Ysleta ISD Project Manager within five (5) working days following the reporting period.

**Content:** The report will show drop and MDF/IDF equipment locations.

### A.3 Documentation: Project Cabling Test Results

**Purpose:** IBM will deliver one (1) copy of the Project Cabling Test Results. This will be a copy of the Cable Test Forms for Category 5 data cabling and fiber optic cabling.

**Delivery:** One (1) hard copy will be delivered to the Ysleta ISD Project Manager within thirty (30) days of project completion.

**Content:** The report will show cable tests results for all cable installed on this project.

### A.4 Documentation: Project Cabling Tests Results for Existing Cable Plant

**Purpose:** IBM will deliver one (1) copy of the Project Cabling Test Results. This will be a copy of the Cable Test forms for existing Category 5 data cabling and fiber optic cabling.

**Delivery:** One (1) hard copy will be delivered to the Ysleta ISD Project Manager within thirty (30) days of project completion.

**Content:** The report will show cable test results for existing cable plant.

## **APPENDIX B**

### **B1 Project Change Control Procedure**

When both of us agree to a change in this Statement of Work, a written description of the agreed change (called a "Change Authorization") will be prepared, which both parties must sign. For IBM, the Project Manager will sign the authorization; for the District, the Superintendent or the Associate Superintendent for Business and Administrative services will sign. The Change Authorization will describe the change, the rationale for the change, and specify any change in the charges, schedule or other terms. Depending on the extent and complexity of the requested changes, IBM may charge for the effort required to analyze it. When charges are necessary in order to analyze a change, IBM will provide a written estimate and begin the analysis on written authorization. The terms of a mutually agreed upon Change Authorization will prevail over those of this Statement of Work or any previous Change Authorization.

## **APPENDIX C CABLING INSTALLATION AND TESTING SPECIFICATIONS**

### **C1 Installation - General Descriptions and Definitions**

#### **Additional Work to MC (Re-Work, Clean-up)**

- Each MC (Main Cross Connect) required for additional work will have the following possible corrections:
- Re-locate existing rack and all attached media cables connected and terminated onto the rack; Re-test some or all existing circuits for test certification; Re-label some or all existing cabling circuits. Confirm or provide a qualified TGB for proper earthing and bonding of the MC.

#### **Additional Work to IC (Re-Work, Clean-up)**

Each IC (Intermediate Cross Connect) required for additional work will have the following possible corrections:

- Re-locate existing rack and all attached media cables connected and terminated onto the rack.
  - Re-test some or all existing circuits for test certification.
- Re-label some or all existing cabling circuits.
  - Confirm or provide a qualified TGB for proper earthing and bonding of the IC.

#### **Connecting Campus MC or IC to Classroom Lab (Inside Plant 4-strand fiber optic cable only)**

- All MC/IC to Lab design will be of the indoor type with a maximum length of 500' with not more than 3 inside cores through what may be firewalls to deliver pathway.
- Furnish and install up to five hundred feet (500') of 4-Strand multimode (62.5x125um) Plenum Indoor Fiber Optics Cable from the MC or IC to the Lab. This pathway will be held by the use of J" Hooks installed not more than 5' apart on red metal or on ceiling points not on ceiling grids or ceiling wire.
- The Fiber will be terminated onto Siemon Anaerobic SC or SFF Fittings and installed into an existing wall cabinet.
- Furnish and install two -(2) duplex 1 meter Fiber Optics Patch Cables SC-SC.
- IBM will provide wire management to ensure a comprehensive, neat completion of work.
- AS BUILT schematics on cabling performed will be supplied.

#### **Connecting Campus MC to Campus IC (Inside Plant 6-strand fiber optic cable only)**

- All MC to IC design will be of the indoor type with a maximum length of 500' with not more than 3 inside cores through what may be firewalls to deliver pathway.
- Furnish and install up to five hundred feet (500') of 6-Strand multimode (62.5x125um) Plenum Indoor Fiber Optics Cable from the MC to the IC. The Fiber will be terminated onto Siemon Anaerobic SC Fittings.
- Furnish and install up to one (1) 24 port Siemon L.I.U. (Light Guide Interface Unit) with 6 SC Loads at the IC.

- Furnish and install into existing MC Fiber Cabinet the new terminated SC connections and loads for a final pathway to IC.
- Furnish and install *two* - (2) duplex 1 meter Fiber Optics Patch SC-SC Jumper Cables.
- IBM will provide wire management **to** ensure a comprehensive, neat completion of work.
- AS BUILT schematics on cabling performed will be supplied.

#### **Connecting Campus MC to Campus IC (Inside Plant 12-strand fiber optic cable only)**

- All MC to IC design will be of the indoor type with a maximum length of 500' with not more than 3 inside cores through what may be firewalls to deliver pathway.
- Furnish and install up to five hundred feet (500') of 12-Strand multimode (62.5x125um) Plenum Indoor Fiber Optics Cable from the MC to the IC. The Fiber will be terminated onto Siemon Anaerobic SC Fittings.
- Furnish and install up **to** one (1) 24 port Siemon L.I.U. (Light Guide Interface Unit) with 12 SC Loads at the IC.
- Furnish and install into existing MC Fiber Cabinet the new terminated SC connections and loads for a final pathway to IC.
- Furnish and install *two* - (2) duplex 1 meter Fiber Optics Patch SC-SC Jumper Cables.
- IBM will provide wire management to ensure a comprehensive, neat completion of work.
- **AS BUILT** schematics on cabling performed will be supplied.

#### **Connecting Campus MC to Campus IC (Inside Plant Cat 3 UTP voice distribution FEEDER cable only)**

- Furnish and install up to three hundred fifty feet (350) 100-pair Telephone Plenum Backbone Cable from the MC to the IC and punch down.
- Furnish and install one ¾" plywood backboard that has been fire retardant treated and firmly attached to the wall area.
- Furnish and install *two* (2) Siemon 110 blocks with legs and C-4's one at the MC Backboard and one at the IC backboard for punch-down of telephone backbone cable.
- The Backbone cable pathway will be held by the use of Caddy Cat.32 "J" Hooks installed not more than 5' apart on red metal or on ceiling points not on ceiling grids or ceiling wire.
- AS BUILT schematics on cabling performed will be supplied.

#### **Connecting Campus MC to Campus IC (Inside Plant) (Turn-Key)**

- All MC to IC design will be of the indoor type with a maximum length of 500' with not more than 3 inside cores through what may be firewalls **to** deliver pathway.
- Furnish and install up to five hundred feet (500) of 12-Strand multimode (62.5x125um) Plenum Indoor Fiber Optics Cable from the MC to the IC. The Fiber will be terminated onto Siemon Anaerobic SC Fittings.
- Furnish and install up *to* five hundred feet (500) 100-pair Telephone Plenum Backbone Cable from the MC to the IC and punch down.
- Furnish and install one (1) 3' x 19" Swing Away Rack onto a ¾" plywood backboard that has been fire retardant treated and firmly attached **to** the wall area.

- Furnish and install two (2) Siemon 110 blocks with legs and C-4's one at the MC Backboard and one at the IC backboard for punch-down of telephone backbone cable.
- Furnish and install up to one (1) 24 port Siemon L.I.U. (Light Guide Interface Unit) with 12 SC Loads at the IC.
- Furnish and install into existing **MC** Fiber Cabinet the new terminated SC connections for a final pathway to IC.
- Furnish and install two -(2) duplex 1 meter Fiber Optics Patch SC Cables.
- IBM will provide wire management to ensure a comprehensive, neat completion of work.
- **AS BUILT** schematics on cabling performed will be supplied.

#### Dual Cable Drops

- Each dual drop location will be serviced by the following cables: two (2) each category 5e, 4-pair cables. The number of locations will be determined by IBM and Ysleta Independent School District prior to installation. Each Dual Drop is priced using existing pathway only – existing pathway definition means IBM will not have to core through walls, add conduit, or add Panduit.
- The following is the dual drop termination scheme (the equipment to be connected to is assumed to already be in place at the telecommunications closet end) for each cable:

Cable	Termination
Category 5e Data	Rack mounted 48-port Cat 5e RJ45 568B high density patch panel
Category 5e Voice	Siemon's Wall mounted 110 block

- IBM will provide wire management to ensure a comprehensive, neat completion of work
  - **AS BUILT** schematics on work to be performed will be supplied.

#### Composite Cable Drops

- Each classroom location drop will be serviced by a composite cable, consisting of three (3) each category 5e, 4-pair cables, and one (1) each 62.5/125 micro fiber duplex cable. The number of locations will vary per school and will be determined by IBM and Ysleta Independent School District prior to installation. Each Composite Drop is priced using existing pathway only – existing pathway definition means IBM will not have to core through walls, add conduit, or add panduit.
- The following is the termination scheme (the equipment to be connected to is assumed to already be in place at the telecommunications closet end) for each cable within the composite cable:

Cable	Termination
Category 5e Data	RJ45 Category 5e 568B Insert
Category 5e Video	RJ45 Category 5e 568B Insert

Category 5e Voice	RJ45 Category 5e 568B Insert
Duplex Fiber	ST-UV Anaerobic connector in a rack mounted F.C.

- All termination's will reside on a single gang simplex faceplate.
- The following is the termination scheme for composite cable (in the telecommunications closet)

Cable	Termination
Category 5e Data	Rack mounted, 24 port modular patch panel
Category 5e Video	Rack mounted, 24 port modular patch panel
Category 5e Voice	Siemons Wall mounted 110 blocks
Duplex Fiber	ST-Anaerobic connector in a rack mounted F.C.

- IBM will provide wire management to ensure a comprehensive, neat completion of work
- IBM will provide AS BUILT schematics on cabling work performed.

#### Classroom Combination **Drops**

- Each classroom location drop will be serviced by a combination cable drop, consisting of six (6) each category 5e, 4-pair cables terminated onto Siemon jacks, and the re-termination of the existing (1) RG-6 coaxial cable and (1) telephone cable drop; OR, each classroom location drop will be serviced by a combination cable drop, consisting of four (4) each category 5e, 4-pair cables terminated onto Siemon jacks, and the re-location of (2) existing Siemon terminated Data jacks. The number of locations will vary per school and will be determined by IBM and Ysleta Independent School District prior to installation. Each Classroom Combination Drop is priced using existing pathway only – existing pathway definition means IBM will not have to core through walls, add conduit, or add Panduit.
- The following is the termination scheme (the equipment to be connected to is assumed to already be in place at the telecommunications closet end) for each cable within the classroom combination cable:

Cable	Termination
Category 5e Data	RJ45 Category 5e 568B Insert
RG-6 Video	'F' Type Insert/connector
Category 3 or 5e Voice	RJ45 or wall mount Category 5e 568B Insert

- All terminations will reside on a single gang simplex faceplate.

- The following is the termination scheme for composite cable (in the telecommunications closet)

Cable	Termination
Category 5e Data	Rack mounted, 24 port MX series patch panel
RG-6 Video	Existing rack mounted, 24 port modular 'F' type patch panel
Category 3 or 5e Voice	Existing Wall mounted 110 blocks

- IBM will provide wire management to ensure a comprehensive, neat completion of work.
- IBM will provide AS BUILT schematics on cabling work performed.

#### Wiring a Lab within a Room – “In-Wall” (IW) Design

- Lab Design cable drops will not exceed 100' in length and shall not include any core or firewall penetrations for this S.O.W.
- Furnish and install up to thirty-five (35) Category 5e, 4-pair twisted, Plenum solid core copper cable drops into a single classroom (Lab). These cable drops will be through sheetrock pathways with dropped acoustical ceilings and will be suspended onto Caddy Cat.32 “J” Hooks at no more than 5' intervals on red metal or on ceiling support positions but not on ceiling grids or ceiling hanging wires.
- **Furnish** and install up to five (5) Quad-Plex Faceplates of single gang construction for W.A.O. (Work Area Outlet) design to deliver service to the students. These faceplates will be flush mounted into Sheetrock walls utilized with Caddy BB-10's.
- Furnish and install one (1) 2' enclosed lockable cabinet onto a ¾" plywood that has been fire retardant treated and is firmly attached to the wall. This Bracket will be grounded to red metal as N.E.C. Code.
- **Furnish** and install one (1) Siemon's 24-port modular patch panel for final central Horizontal connection point.
- Furnish and install one (1) Wire Manager for neat and proper pathway placement.
- Furnish and install up to thirty-five (35) Siemon Angled Max Jacks into faceplates.
- Furnish and install up to sixty (60) Siemon Category 5e Patch Cables in either 1 or 3 meter design for use at the **W.A.O.** or at the Patch Panel.
- IBM will provide wire management to ensure a comprehensive, neat completion of work.
- AS BUILT schematics on cabling performed will be supplied.

#### Wiring a Lab within a Room – “Outer-Wall” (OW) Design

- Lab Design cable drops will not exceed 100' in length and shall not include any core or firewall penetrations for this S.O.W.
- Furnish and install up to thirty-five (35) Category 5e, 4-pair twisted, Plenum solid core copper cable drops into a single classroom Lab. These cable drops will run down the outer wall with Wiremold proceeding from dropped acoustical ceilings and will be



suspended onto Caddy Cat.32 "J" Hooks at no more than 5' intervals on red metal or on ceiling support positions but not on ceiling grids or ceiling hanging wires.

- **Furnish** and install up to five (5) Quad-Plex Faceplates of single gang construction for W.A.O. (Work Area Outlet) design to deliver service to the students. These faceplates will be surface mounted onto the outside of the wall utilizing **Wiremold** and Siemon surface mounted boxes.
- Furnish and install one (1) 2' enclosed lockable cabinet onto a ¾" plywood that has been fire retardant treated and is firmly attached to the wall. This Bracket will be grounded to red metal as N.E.C. Code.
- Furnish and install one (1) Siemons 24-port modular patch panel for final central Horizontal connection point.
- Furnish and install one (1) Wire Manager for neat and proper pathway placement.
- Furnish and install up to thirty-five (35) Siemons Angled Max Jacks into faceplates.
- Furnish and install up to sixty (60) Siemons **Category 5e** Patch Cables in either 1 or 3 meter design for use at the W.A.O. or **at** the Patch Panel.
- IBM will provide wire management to ensure a comprehensive, neat completion of work.
- AS BUILT schematics on cabling performed will be supplied.

#### Connecting Campus **MC** to Portable IC (Inside to Outside Plant)

- Core, drill and install 2 ½' EMT conduit sleeve into main building.
- Install one (1) 12"x12"x8" "J" Junction Entrance Box as an entrance to main building with connection by EMT sleeve entrance.
- Drill and install main building metal attachments (eye or rams head) for aerial figure 8 dead end.
- Drill and install on portable classroom one (1) building metal attachments (eye or rams head) for aerial strand.
- Install one (1) 12"x12"x8" "J" Junction Entrance Box as an entrance **to** portable classroom building with connection by EMT sleeve entrance.
- From the MC to the IC place one (1) 6-strand Fiber Optics 62.5/125um cable for a backbone connection.
- Furnish and install up to (150) 6mm Strand with all attachments including building aerial attachments
- Install from the MC to the exit of building one (1) 50 pair Category 3 backbone cable.
- At the exit from main building and the portable classroom building a 50 pair primary protector box will be installed and all copper voice cable will be punched down.
- The Category 3 backbone cable will continue from the main building exit primary protectors to the IC entrance primary protectors where the backbone will be punched and then into the 110 block.
- Each IC will have Circa 50 primary pair protection on both ends, with loads.
- IBM will provide wire management to ensure a comprehensive, neat completion of work
- AS BUILT schematics on cabling performed will be supplied.

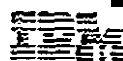
#### Existing Cable Removal

- **IBM** will include the removal of any abandoned cable left within the schools as a result of the replacement of an existing media with the installation of a new media cable. (Data, Voice or Video)
- Any abandoned cable not replaced by IBM with the installation of a new media cable will be covered with a blank faceplate and the existing cable left within the walls and or ceilings.

## C2 Functional Testing

*Functional Testing will be performed in conformance with the following:*

- **Fiber Meter** – Transmission and path **loss** testing (Fiber meter test method). IBM will perform fiber meter testing on all fiber optic cable installed under this SOW. Printed test results will be provided.
- **Category 5e Cable** – Category 5e compliance testing per UL standards. IBM will perform Category 5e testing on the Category 5e cable installed under this SOW in accordance with EIA/TIA standards. Printed test results will be provided.



## APPENDIX D SIGNATURE PAGE

IBM (we) will provide, and Ysleta ISD (you) agree to accept. IBM Services (Services) for "IBM Statement of Work for Cabling Services" under the terms and conditions of the Agreement consisting of RFP #22-1115-016RFP and the Contractor's Appendix to RFP#22-1115-016RFP, the General Agreement dated January 17, 2002, the IBM Customer Agreement and this Statement of Work. For Scope Of Services, Completion Criteria. Charges and other applicable terms refer to the IBM Proposal for the provisions of Ysleta ISD "IBM Statement of Work for VOIP Systems Integration", dated January 17, 2002.

IBM is aware of the District's reliance on an outside source of funding (Universal Service Fund) to execute on the implementation tasks described in this SOW. Should Ysleta ISD not receive the requested funding for E-rate 5 or should Ysleta ISD receive only partial funding, IBM will work with Ysleta ISD to identify those portions of this Statement of Work that can be accomplished based upon available funding. Should such a lessening of scope involve a redesign or some other change in pricing, IBM agrees to negotiate in good faith with Ysleta ISD to make the required changes according to the Project Change Control Procedure outlined in Appendix B. It is specifically understood by IBM and Ysleta ISD that no E-rate 5 activity will occur prior to IBM's receipt from Ysleta ISD of written authorization to proceed, which authorization may be a signature on the second Signature Page, following this one. It is understood by Ysleta ISD and IBM that this SOW and its associated pricing is based upon IBM receiving written approval from Ysleta ISD to proceed with E-rate 5 no later than December 31, 2002. In the event this approval is not received by this date, IBM reserves the right to restructure the SOW to incorporate on those tasks that can be successfully completed by IBM prior to June 30, 2003. This proposal will remain valid through December 31, 2002.

Total Charges: \$2,090,400, which includes travel and living expenses, and applicable taxes which are the responsibility of Ysleta ISO.

Both of us agree that the complete agreement between us regarding these Services will consist of 1) this Statement of Work and 2) the Agreement consisting of RFP #22-1115-016RFP and the Contractor's Appendix to RFP#22-1115-016RFP, the General Agreement dated January 17, 2002, and the IBM Customer Agreement.

Agreed to:  
Ysleta Independent School District

By Vernon L. Butler  
Vernon L. Butler  
Interim Superintendent  
(Authorized Signature)

Name Vernon L. Butler

Date: 1/17/02

Customer Number 9968471

Customer Address:  
Ysleta Independent School District  
9600 Sims Dr.  
El Paso, TX 79925  
Project name or Identifier:

Start Date: July 1, 2003

Agreed to:  
International Business Machines Corporation

By Tracy H. Diaz  
Tracy H. Diaz  
(Authorized Signature)

Name Tracy H. Diaz

Date: January 17, 2002

Reference Agreement No. QFE111

IBM Office Address:

4487 N. Mesa  
El Paso, Texas 79902  
YISD Cabling Services  
End Date: June 30, 2003